

VIA CFTC Portal

April 23 2018

Mr Christopher Kirkpatrick
Commodity Futures Trading Commission
115 21st Street NW
Three Lafayette Centre
Washington DC 20581

Dear Mr Kirkpatrick

Non-deliverable swaps (ND IRS) denominated in Korean Won (KRW), Indian Rupee (INR) and Chinese Renminbi (CNY)

Pursuant to CFTC regulation §39.5(b), LCH Limited (“LCH”), a derivatives clearing organization (“DCO”) registered with the Commodity Futures Trading Commission (the “CFTC”), is submitting Non-deliverable swaps (NDIRS) denominated in Korean Won (KRW), Indian Rupee (INR) and Chinese Renminbi (CNY) for determination of whether mandatory clearing should apply.

Background

Non deliverable interest rate swaps (NDIRS) involve counterparties swapping fixed interest payments for floating rate payments on the same underlying notional principal, on fixed dates over the life of the contract, with the net cash settled in USD. The proposed currencies, KRW, INR and CNY, are the most actively traded NDIRS with volumes comparable to Singapore Dollar and Hong Kong Dollar swaps (currently cleared by SwapClear in deliverable form). SwapClear will settle all flow related to these products (whether notional, interest, fees and variation margin) in USD. The maximum maturity (based on existing liquidity) is 11 years for KRW and INR and 5.5 years for CNY.

Factors for determination

The existence of significant outstanding notional exposures, trading liquidity, and adequate pricing data

The transformation from currency to USD is derived from the prevailing FX rate. The maximum maturity (based on existing liquidity) is 11 years for KRW and INR and 5.5 years for CNY.

SwapClear will use data from Bloomberg and Reuters, as with its current swap book, and will also use FX swap price points gathered from ForexClear members’ contributions.

Based on the statistics of the latest Triennial Survey of the Bank for International Settlements, the daily average turnover in the three NDIRS currencies represents 2% of that in USD denominated OTC interest rate swaps in the overall market.

The availability of rule framework, capacity, operational expertise and resources, and credit support infrastructure to clear the contract on terms that are consistent with the material terms and trading conventions on which the contract is then traded

LCH has a well-developed rule framework and support infrastructure for clearing interest rates swaps. LCH intends to leverage this existing operational capability when extending its offering to NDIRS.

In order to prepare for the launch of this product, LCH will perform testing to ensure that it is able to clear these products in a manner which is consistent with the terms on which they are traded.

Further to this, LCH has notified its Clearing Members of a number of minor rule changes which have been made in order to support the clearing of NDIRS in the above mentioned currencies. The rule changes have been submitted for self certification to the CFTC and are available on the LCH website.

The effect on mitigation of systemic risk, taking into account the size of the market for such contract and the resources of the DCO available to clear the contract

The NDIRS product does not introduce any novel risks to LCH, as the operational capability to manage the product is already in place.

LCH expects current SwapClear Clearing Members to start clearing NDIRS, once the service is live.

Based on the statistics of the latest Triennial Survey of the Bank for International Settlements, the daily average turnover in the three NDIRS currencies represents 2% of that in USD denominated OTC interest rate swaps in the overall market. Therefore, the introduction of NDIRS eligibility is unlikely to have a significant impact on the risk profile or total resources held by the SwapClear service. As such, the systemic risk profile of LCH remains unchanged as a result of the new product offering.

The effect on competition, including appropriate fees and charges applied to clearing

CME Clearing and OTC Clearing Hong Kong Limited (OTC Clear) currently offer clearing services for NDIRS in all or a subset of currencies that LCH plans to clear (as well as other emerging markets' currencies) and at similar tenors. The Singapore Exchange Derivatives Clearing (SGX-DC) also offers clearing of NDIRS but in different currencies to LCH's.

Following the launch, scheduled for April 30, 2018 NDIRS will be the subject of a fee holiday until December 31, 2018 after which a fee plan specific to this product will be applied. The fees will differ according to the tariff chosen by Members and may consist of an annual charge or a charge per trade. Members will also be charged for fees related to the client clearing of NDIRS. Clearing Members will be notified of the fee plan ahead of the product's launch.

The existence of reasonable legal certainty in the event of the insolvency of the relevant DCO or one or more of its clearing members with regard to the treatment of customer and swap counterparty positions, funds and property

The level of legal certainty around the clearing of NDIRS contracts is in all material respects the same as that of the products already cleared in the SwapClear service at LCH.

Insofar as legal certainty in the event of the insolvency of the DCO is concerned, LCH would be wound up under English law.

Further information §39.5(b)(iii-viii)

Product terms for NDIRS are market standard and follow **2006 ISDA Definitions** and the **1998 FX and currency option ISDA Definitions**. NDIRS are also part of the Financial products Markup Language (FpML) standard¹, which is a protocol for sharing information on derivatives and other products. The participant eligibility standards for NDIRS are the same as those for existing SwapClear Clearing Members.

As noted above, SwapClear will use data from Bloomberg and Reuters, as with its current swap book, and will also use FX swap price points gathered from ForexClear members' contributions.

No material revisions to the existing risk models/parameters and/or liquidity management framework is required for LCH to offer the clearing of the product; however the following adjustments have been made:

- Stress testing scenarios: SwapClear have made a number of additions and changes to the suite of stress testing scenarios to accommodate NDIRS. Particularly, historic scenarios have been updated and ForexClear scenarios, interest rate parity scenarios, theoretical scenarios and a currency crisis scenario have all been added to the SwapClear scenario suite.
- Initial margin methodology: Initial margin for NDIRS will have two components, (1) Interest rate risk from NDIRS zero curve and (2) FX risk from the foreign currency NPV transformation into USD.
- Additional margins: NDIRS currencies will be added to the current SwapClear basis risk framework, liquidity risk add-on surveys have been updated to include submissions from SwapClear Members in KRW, INR and CNY. SwapClear will extend the Sovereign Risk Margin (SRM) as used in ForexClear for these NDIRS. The extended model for SRM has 2 components (1) general country risk: a risk-related charge applied on currencies that are exposed to potential volatility that is not adequately captured within initial margin, and (2) market risk (interest rate and FX): this will be calculated using a 'temperature gauge' to highlight potential currency risk/devaluation for emerging market currencies and will provide for additional margin as the risk rises.

LCH will make a number of minor changes to its Rulebook to enable clearing of ND IRS in KRW, CNY and INR in the following sections:

¹ specifically <http://www.fpml.org/coding-scheme/floating-rate-index> published on December 21, 2017

- FCM Product Specific Contract Terms and Eligibility Criteria Manual
- Product Specific Contract Terms and Eligibility Criteria Manual
- FCM Procedures
- Procedures Section 2C
- Procedures Section 1

The rule changes have been submitted to the CFTC pursuant to §40.6(a), following consultation with LCH Clearing Members.

LCH engages its Clearing Members in the design and testing of new products at an early stage, through regular meetings and working groups. Clearing Members have been formally notified of the changes which LCH is required to make to its Rulebook.

Notice of this submission under CFTC regulation §39.5(b) was given to SwapClear Clearing Members on 6 April 2018 and a copy of this notice is provided at Appendix A. Furthermore, this submission is publicly available at: <http://www.lch.com/rules-regulations/regulatory-responses>

LCH intends to launch these products with its Clearing Members and clients no earlier than April 30, 2018.

Should you have questions please contact me at julian.oliver@lch.com.

Yours sincerely



Julian Oliver
Chief Compliance Officer
LCH Limited

Appendix A

Notice of this submission provided to SwapClear Clearing Members

Memo

To	SwapClear Clearing Members
From	David Horner, Head of In-Business Risk Rates
Date	6 th April 2018
Subject	ND IRS (KRW;CNY;INR) submission for determination of clearing requirements

Pursuant to CFTC regulation §39.5(b), LCH Limited (LCH), a derivatives clearing organization (DCO) registered with the Commodity Futures Trading Commission (the CFTC), is submitting Non-deliverable swaps (ND IRS) denominated in Korean Won (KRW), Indian Rupee (INR) and Chinese Renminbi (CNY) for determination of whether mandatory clearing should apply.

As per CFTC regulation §39.5(b)(viii), LCH is required to notify members of its submission. This note does not constitute a notification that the products are live for clearing. A notice announcing the live date and arrangements for the formal product launch will be published separately.

Factors for determination

The existence of significant outstanding notional exposures, trading liquidity, and adequate pricing data
NDIRS contracts require counterparties swapping fixed interest payments for floating rate payments on the same underlying notional principal, on fixed dates over the life of the contract, with the net cash settled in USD.

KRW, INR and CNY are the most actively traded NDIRS with volumes comparable to Singapore Dollar and Hong Kong Dollar swaps (currently cleared by SwapClear in deliverable form). SwapClear will settle all flow related to these products (whether notional, interest, fees and variation margin) in USD. The transformation from currency to USD is derived from the prevailing FX rate. The maximum maturity (based on existing liquidity) is 11 years for KRW and INR and 5.5 years for CNY.

SwapClear will use data from Bloomberg and Reuters, as with its current swap book, and will also use FX swap price points gathered from ForexClear members' contributions².

The availability of rule framework, capacity, operational expertise and resources, and credit support infrastructure to clear the contract on terms that are consistent with the material terms and trading conventions on which the contract is then traded

LCH has a well-developed rule framework and support infrastructure for clearing interest rates swaps. LCH intends to leverage this existing operational capability when extending its offering to ND IRS.

² KRW, INR and CNY non-deliverable forwards are already cleared by ForexClear.

In order to prepare for the launch of this product, LCH will perform testing to ensure that it is able to clear these products in a manner which is consistent with the terms on which they are traded.

Further to this, LCH will notify its Clearing Members of a number of minor rule changes which will be made in order to support the clearing of ND IRS in the above mentioned currencies. The rule changes will be certified with the CFTC and be made available on the LCH website.

The effect on mitigation of systemic risk, taking into account the size of the market for such contract and the resources of the DCO available to clear the contract

The ND IRS product does not introduce any novel risks to LCH, as the operational capability to manage the product is already in place.

LCH expects current SwapClear Clearing Members to start clearing ND IRS, once the service is live.

Based on the statistics of the latest Triennial Survey of the Bank for International Settlements³, the daily average turnover in the three ND IRS currencies represents 2% of that in USD denominated OTC interest rate swaps in the overall market. Therefore, the introduction of ND IRS eligibility is unlikely to have a significant impact on the risk profile or total resources held by the SwapClear service. As such, the systemic risk profile of LCH remains unchanged as a result of the new product offering.

The effect on competition, including appropriate fees and charges applied to clearing

CME Clearing and OTC Clearing Hong Kong Limited (OTC Clear) currently offer clearing services for ND IRS in all or a subset of currencies that LCH plans to clear (as well as other emerging markets' currencies) and at similar tenors. The Singapore Exchange Derivatives Clearing (SGX-DC) also offers clearing of ND IRS but in different currencies to LCH's.

Following the launch, scheduled for April 2018, ND IRS will be the subject of a fee holiday until 31st December 2018 after which a fee plan specific to this product will be applied. The fees will differ according to the tariff chosen by Members and may consist of an annual charge or a charge per trade. Members will also be charged for fees related to the client clearing of ND IRS. Clearing Members will be notified of the fee plan ahead of the product's launch.

The existence of reasonable legal certainty in the event of the insolvency of the relevant DCO or one or more of its clearing members with regard to the treatment of customer and swap counterparty positions, funds and property

The level of legal certainty around the clearing of ND IRS contracts is in all material respects the same as that of the products already cleared in the SwapClear service at LCH.

Insofar as legal certainty in the event of the insolvency of the DCO is concerned, LCH would be wound up under English law.

Further information §39.5(b)(iii-viii)

³ <https://www.bis.org/publ/rpfx16.htm>

Product terms for ND IRS are market standard and follow **2006 ISDA Definitions** and the **1998 FX and currency option ISDA Definitions**. ND IRS are also part of the Financial products Markup Language (FpML) standard (specifically <http://www.fpml.org/coding-scheme/floating-rate-index> published on 21st December 2017), which is a protocol for sharing information on derivatives and other products.

The participant eligibility standards for ND IRS are the same as those for existing SwapClear Clearing Members.

As noted above, SwapClear will use data from Bloomberg and Reuters, as with its current swap book, and will also use FX swap price points gathered from ForexClear members' contributions.

No material revisions to the existing risk models/parameters and/or liquidity management framework are required for LCH to offer the clearing of the product; however the following adjustments have been made:

- **Stress testing scenarios:** SwapClear have made a number of additions and changes to the suite of stress testing scenarios to accommodate NDIRS. Particularly, historic scenarios have been updated and ForexClear scenarios, interest rate parity scenarios, theoretical scenarios and a currency crisis scenario have all been added to the SwapClear scenario suite.
- **Initial margin methodology:** Initial margin for NDIRS will have two components, (1) Interest rate risk from NDIRS zero curve and (2) FX risk from the foreign currency NPV transformation into USD.
- **Additional margins:** NDIRS currencies will be added to the current SwapClear basis risk framework, liquidity risk add-on surveys have been updated to include submissions from SwapClear Members in KRW, INR and CNY. SwapClear will extend the Sovereign Risk Margin (SRM) as used in ForexClear for these NDIRS. The extended model for SRM has 2 components (1) general country risk: a risk-related charge applied on currencies that are exposed to potential volatility that is not adequately captured within initial margin, and (2) market risk (interest rate and FX): this will be calculated using a 'temperature gauge' to highlight potential currency risk/devaluation for emerging market currencies and will provide for additional margin as the risk rises.

LCH will make a number of minor changes to its Rulebook to enable clearing of ND IRS in KRW, CNY and INR in the following sections:

- FCM Product Specific Contract Terms and Eligibility Criteria Manual
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The rule changes will be submitted to the CFTC pursuant to §40.6(a), following consultation with LCH Clearing Members.

LCH engages its Clearing Members in the design and testing of new products at an early stage, through regular meetings and working groups. Clearing Members have been formally notified of the changes which LCH is required to make to its Rulebook.

Further information will form part of the full §39.5 filing which will be publicly available on the LCH website. LCH looks forward to working with Clearing Members and the CFTC in the determination of clearing requirements. Please do not hesitate to contact me regarding any questions raised by this information.